

ELECTROPHORETIC MEDIUM AND DISPLAY WITH IMPROVED IMAGE STABILITY

Abstract of Disclosure

An electrophoretic medium comprises a plurality of particles suspended in a suspending fluid, the particles being capable of moving through the fluid upon application of an electric field to the medium, the fluid having dissolved or dispersed therein a polymer having a number average molecular weight in excess of about 20,000, the polymer being essentially non-absorbing on the particles. The polymer improves the bistability of the display (i.e., the period for which a written image persist without the display being refreshed) but does not greatly increase the viscosity of the suspending fluid, thus keeping the switching time of the display within reasonable limits. The medium may be encapsulated, or may be in the form a polymer-dispersed electrophoretic medium.

Figures